THE AMERICAN
JOURNAL OF PSYCHOLOGY
Founded in 1887
by
G. STANLEY HALL

VOL. XXXIII JANUARY, 1922 No. 1

INSTINCT AND VALUE*

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"We may say, then, that directly or indirectly the instincts are the prime movers of all human activity. The instinctive impulses determine the ends of all activities and supply the driving power by which all mental activities are sustained; and all the complex intellectual apparatus of the most highly developed mind is but a means towards these ends, is but the instrument by which these impulses seek their satisfaction,—and in them we are confronted with the central mystery of life and mind and will."
W. McDougall, "Social Psychology," 44.

When, many years ago, Bohn asked: "*Qu'est-ce que l'instinct? Un mot;*" and Condillac remarked: "*L'instinct n'est rien;*" they expressed an opinion which finds little favor today. Instincts are now recognized as genuine forces and of supreme importance. Within recent years whole philosophies, social systems, economic structures have been erected with instincts as their foundation. The quotation given above represents a view in which instinct, far from being a mere word, is the prime factor in human activity; far from being nothing, it is responsible for everything.

When, more than half a century ago, the "marvels and mysteries of instinct"[1] first became subjects of considerable interest, the general opinion was that the instincts were God's peculiar gift to animals just as reason was His peculiar gift to man. "We may call the instincts of animals," say Kirby and Spence,[2] "those faculties implanted in them by the Creator, by

*Abstract of a Dissertation presented to the Faculty of the Graduate School of Yale University on the Candidacy for the Degree of Doctor of Philosophy in 1916.

which, independent of instruction, observation, or experience, and without knowledge of the end in view, they are all alike impelled to the performance of certain actions tending to the well-being of the individual and the preservation of the species;" but "man is, indeed, devoid of instinct; and his reason, if indeed it be of the same nature as that of the higher beasts, is as superior in its results as the instinct of the bee is to the instinctive turning of the plant to the light."[3] However, this distinction was soon overcome by a psychology which added to the old rationalistic method the method of objective observation which had already discovered the instincts in animals. Instinct was seen to be common to man as well as to animals, and it now became a question of what were the relative positions of instinct and reason in man.[4] The impetus of rationalism tended, for a time, to keep reason on its throne. However, the rise of Darwin and Spencer, and the swelling train of evolutionary doctrines which followed after them, tended more and more to minimize the importance of reason, until reason was finally reduced to the position of the handmaid of instinct. Whereas, in the past, men looked for a divine or rational principle to guide their conduct, they now turn to an analysis of their instincts. These, as James has so vividly shown, are not rational: they simply are,[5] and as such, must be taken at their face value. Therefore, the tendency today is to define character as a mosaic of instincts and emotions.[6] The finer sentiments and ideals of man are simply slight refinements of the instincts. The reversal is complete. Whereas the instincts were wont to be explained as the gift of God, God is now interpreted in terms of the instincts.[7] That is, the aims and values of the individual, as they are found in society, in art, and in the common pursuits of life, are simply the reflection of instinctive and emotional activities.

This almost Copernican change of emphasis marks a tremendous step in the direction of a clearer, more realistic conception of human nature. It opens up an entirely new realm for psychology and its various branches. It places the individual in a category where his behavior and the values he strives for

[1]G. Garratt: "Marvels and Mysteries of Instincts," 1857. Lord Henry Brougham: "Dialogues on Instinct," 1844. Jonathan Couch: "Illustrations of Instinct," 1847. T. L. Kemp: "Indications of Instinct," 1854.

[2]"Introduction to Entomology," 1858.

[3]T. L. Kemp, *op. cit.*, 138.

[4]Cf. H. R. Marshall: "Instinct and Reason."

[5]W. James: "Principles of Psychology," I, 386.

[6]Cf. Alexander Shand: "The Foundations of Character"; also W. McDougall: "Social Psychology."

[7]A notable example of this tendency is Benjamin Kidd's "Social Evolution." Almost all anthropological works adopt this view. Cf. Lippert's "Kulturgeschichte," introductory chapter.

may be made subjects of scientific research. It offers an opportunity for scientific speculation which has already greatly enriched the literature of the twentieth century.

Out of the valuable contribution to modern thought which the theory of instinct has made, however, there has risen also a serious danger. We are confronted today by a new kind of rationalism, the rationalism of instinct. This rationalism has substituted for the discarded innate ideas of an older, philosophical rationalism, a group of instincts, and with these as a starting point, has constructed systems which may some day seem just as fantastic and incoherent as the older rationalistic systems appear to us today. One of the most widely known examples of this type of rationalism is W. Trotter's exposition of the herd instinct. It will be remembered that Trotter attributes the entire range of social phenomena to four instincts, including the instinct of gregariousness. His particular hobby is the gregarious or herd instinct, to whose activities he ascribes a great range of human activities. The writer's interest in the problem of instinct was first aroused by the ease with which Trotter demonstrated the existence of the herd instinct and its responsibility for herd phenomena. To the writer it seemed almost as easy to demonstrate that all herd phenomena could be traced to the interlacing effect of instincts other than the herd instinct. In short, it seemed quite plausible to attribute all herd phenomena to other instincts *without reference to any herd instinct whatsoever*.

Probably the high water mark of psychological rationalism is McDougall's "Social Psychology." To the seven or eight primary instincts (including gregariousness) which he selects, McDougall attributes the fabulous wealth of modern social institutions. Strangely enough, McDougall himself condemns this kind of procedure on the part of philosophers. He quotes, in this connection, the assumption upon which V. Cousin bases his philosophy of history:

> "The various manifestations and phases of social life are all traced back to tendencies of human nature from which they spring, from five fundamental wants, each of which has corresponding to it a general idea. The idea of the useful gives rise to mathematical and physical science, industry and political economy; the idea of the just to civil society, the State, and jurisprudence; the idea of the beautiful to art; the idea of God to religion and worship; and the idea of truth in itself, in its highest degree and under its purest form, to philosophy. These ideas are argued to be simple and indecomposable, to coexist in every mind, to constitute the whole foundation of humanity, and to follow in the order mentioned."

McDougall then adds:

> "We have here the spectacle of a philosopher, who exerted a great influence on the thought of his own country, and who rightly conceived the relation of psychology to the social sciences, but who, in the absence of

any adequate psychology, contents himself with concocting on the spur of the moment the most flimsy substitute for it in the form of these five assumptions."[8]

McDougall's criticism is just. And yet he has done exactly the same thing. The chief difference in this case lies not in the method, but in the instruments at his disposal. The instincts, McDougall's instruments, are slightly more modern than Cousin's 'elementary ideas.' But so far as scientific coherence is concerned, McDougall's creation will probably appear as fantastic to future psychologists as Cousin's does to us today.

There is no questioning the fact that instincts are fundamental and determining factors in the organism and in society. But our knowledge of the instincts is by no means such as to warrant any wholesale speculation, far less any scientific certainty about the individual and social values to which they give rise. The writings of Carleton Parker have indicated with particular force the necessity of conservatism in respect to the claims made for instinct. Naturally it is gratifying to find economists like Parker and Fisher looking to psychologists for an explanation of the values which they and other economists have hitherto taken for granted. The attempt to interpret economic values in the light of instinctive tendencies cannot but add to the richness of economic speculation. At the same time, the need for a clearer definition of instinct and of the scope within which we may attribute specific values to instincts becomes all the more imperative. Let us therefore briefly consider the definition of instinct in relation to the determination of values.

I. The Mechanistic Conception

A careful analysis of instinct leads by direct steps from a consideration of complex, chain activities, to more elementary reflex activities. The tropism as defined by Loeb is instinct in its simplest terms. The tropism is a definite physico-chemical mechanism within the organism which, when properly stimulated, will give rise to a specific response. According to Loeb, the organism is entirely composed of such tropisms or instinctive forces. "Our wishes and hopes, disappointments and sufferings, have their source in instincts which are comparable to the light instinct of the heliotropic animals."[9] Aside from the biological rationalizing by which Loeb has arrived at this comprehensive claim for his theory of instincts, there is another question which must here be considered. How can an organism made up of tropistic entities experience hope and suffering? What kind of tropisms are these? If the activities of the organism are simply

[8] *Op. cit.*, 12 f.
[9] "The Mechanistic Conception of Life," 30.

a continuous series of tropisms, one mechanical unit impinging upon another, why should hope and suffering ever arise? There is implied here a conflict of instinctive forces, and a comparison of results which is quite foreign to the mechanical conception of instinct with which Loeb sets out.

As a matter of fact, Loeb quickly modifies his original idea of a tropism through the introduction of the concept "Unterschiedsempfindlichkeit," or 'differential response.' Instead, therefore, of simple instinctive forces, acting uniformly in the presence of a given object, we have tropistic forces that act largely in terms of past and present experience. The associative area, according to Loeb, is the center through which simple, mechanical activities are modified. With this qualification, the strictly mechanistic definition of instinct becomes so involved that it is impossible to select certain definite instinctive activities and attribute to them definite results and values. The tropism is now regarded not as an activity which determines the entire organism from time to time, but as an activity which is controlled or modified by the organism as a whole through the instrumentality of the associative area.

Loeb's mechanistic conception of instinct makes inevitable the conclusion that the organism as a whole enters into the determination of the part, and that the values sought by the instincts are dependent upon the values sought by the organism as a unit. And it is furthermore apparent, from Loeb's own statements, that the mechanical entities, the tropisms, which were intended to explain the actions of the organism, *do not even exist except in theory*. In reality, they are inseparable aspects of the organism and cannot be explained except in terms of the very organism which they were intended to explain. Obviously, the mechanistic concept as exemplified by Loeb has limitations as an explanation, whatever its value as a *method* may be. For the present, it is apparent that values cannot be explained or predicted, either for the individual or for society, upon the basis of mechanistic instincts. The mechanist may make any assumptions he pleases about life so long as those assumptions lead to fruitful results. But fruitful as have been the results of the mechanistic method thus far, they do not warrant the broad claims which psychologists have been making for instincts. These claims have grown rather out of a scientific romancing than out of careful and logical deductions from the facts which the mechanistic method has revealed.

II. The Behavioristic Method

The behavioristic definition of instinct is in general quite the opposite of the mechanistic definition. It usually insists upon the impossibility of explaining the character of an organism

as a collection of instincts, reflexes, or habits. It affirms, on the other hand, that the organism is a unit, possessing characteristics which are present in none of the parts into which it may be mechanically dissected, but which must be regarded as unique. Now this claim for uniqueness is the very point which the mechanistic conception is compelled to destroy, for the essence of mechanism is to reduce organic phenomena to the simplest possible terms, *i. e.*, physico-chemical elements. But when we ask the behaviorist to point out in what sense the organism is unique, he tells us, *behavior*. When we ask: "What is behavior?", the answer is: "Behavior is any process of release which is a function of factors external to the mechanism released."[10] Instinct, according to this definition, is naturally a form of behavior.

Strange to say, the rigid application of this definition of behavior destroys the very distinction which the behaviorist insists upon, namely, the uniqueness of organic as contrasted with mechanical response. According to this definition the response of a bell to a button is just as much behavior as the response of a man when his foot is stepped on. Each is a process of release which is a function of factors external to the mechanism. In order to avoid this dilemma the behaviorist then advances all sorts of criteria for the uniqueness of an organism, but none of his criteria satisfies. To make a long story short, he is unable to define the organic except in terms of behavior, and at the same time he is unable to define behavior except in terms of an organism. What distinguishes an organism is behavior, but what distinguishes behavior is its organicity!

It becomes evident that behaviorism rests upon an assumption, more or less clear in the minds of its adherents, as to the types of action which shall constitute its field of research. It selects the organism, not by logical definition but by practical judgment. There is no logical difference between behaviorism as applied to organisms and behaviorism as applied in physics, chemistry, or biology. Every scientist is a behaviorist in his field. And absolutely no scientific reason is given why the behaviorist should consider his theory or the objects of his research unique, except the reason that *they are his*.[11]

In short, behaviorism as a theory or method rests ultimately not on a logical but on a practical judgment, a choice of values.

As in the case of mechanism, behaviorism is not an explanation, not a philosophy. It is a method of investigation. And it is

[10]E. B. Holt: "Response and Cognition," *Jl. of P., Ps., & Sc. M.*, July 8, 1915, 371.

[11]The physiological explanation of behavior represented by H. L. Jennings only apparently escapes this statement. A criticism of physiological behavior will be made elsewhere.

for its usefulness in discovering and defining instincts that we must here value it. The essence of the behavioristic method is the establishing of certain relatively constant relations between certain stimuli and the responses of an organism or group of organisms. If it can be determined that a certain type of stimulus will almost invariably bring the same response from a certain group of organisms, then it may be assumed that the response is instinctive or habitual. The method is essentially a systematic attempt to correlate stimuli with responses.

The correlations thus far obtained in the field of human psychology through the behavioristic method, especially by Watson, tell us something about instinct. But it is certain that they do not tell us very much. On the basis of the behavioristic method, we have only the scantiest data upon which to base any conclusions regarding instincts. Certainly none of the results thus far justifies us in setting up anything but a tentative classification of instincts, far less in describing what certain instincts have accomplished, and least of all, what certain instincts will accomplish in the future.

It may be remarked that, although the behavioristic concept of an organism is antithetical to the mechanistic concept, the value of the behavioristic method is largely dependent upon the degree in which the mechanistic conception is true. Naturally, consistent correlations between stimuli and behavior cannot be formed unless there are those relatively independent tropistic entities which the mechanist describes. The difficulties which both the behavioristic and the mechanistic methods encounter in their search for such entities recur in another point of view from which the study of instinct is approached, namely, the part played by intelligence.

III. Instinct and Intelligence

Intelligence, no matter how defined, is a factor which greatly complicates the search for fundamental and relatively fixed instincts. Loeb identifies intelligence with the associative area, through which the tropistic actions are radically modified. The consistent behaviorist recognizes intelligence only in terms of the changing activities of the organism. Thus both mechanist and behaviorist wisely rid their technique of a troublesome anthropomorphic conception, even though they do not escape the necessity of explaining the complex reactions which the so-called intelligent organism displays.

But because the mechanistic and behavioristic conceptions avoid anthropomorphism, they ignore what is, after all, a distinctly anthropomorphic problem, namely, the problem of value. What we are interested in is an explanation of our individual and social values in terms of the instincts to which these

values have been attributed. Now the behavioristic method deliberately eliminates the concept of value, while the mechanistic method, if taken as a philosophy, renders the concept of value meaningless. This difficulty the concept of intelligence seems to overcome, for by definition, intelligence is the ability of an organism to *profit* by experience. But this obviously anthropomorphic definition of intelligence leads us into a whole library of controversial literature. It precipitates us directly into the problem of consciousness, its origin, its significance, etc. We cannot take up this controversy here. We shall here but call attention to a certain dilemma bearing upon our problem, which any idea of intelligence gives rise to.

Intelligence, as an aspect of consciousness, may be merely a concomitant, a spectator observing the activities of instinct. In this case, it can have no effect upon the instincts. Nor can it help the organism to profit by experience. On the other hand, intelligence may be a factor in the causal series which does enable the organism to learn by experience and to modify the original instincts. But if we admit such a factor, we admit the existence of something more fundamental than the instincts themselves. For how can the instincts, considered as mechanical entities, each giving rise to its characteristic value, combine to create a factor which shall represent the value of the organism as a whole? In so far as the instincts are defined as fixed and fundamental forces, it is impossible for them to create a principle to which they shall be subordinated. And on the other hand, in so far as we admit that the instincts are subordinated or harmonized, in terms of the organism as a whole, to some other factor such as intelligence, we must give up the claim that the instincts are the fundamental forces.

IV. Emotion and Instinct

This criticism applies equally well to that type of psychological rationalism which regards emotion as the criterion of instinct. We may disregard entirely the obvious fact that as soon as we begin to define instincts in terms of emotions anybody's introspections would make a book. But even if it were possible to define certain instincts in terms of their emotional core,[12] we should still meet this difficulty, namely: in so far as we define the instinct-emotions as fixed we cannot account for the endless variation of instinct; and in so far as we account for the obvious varieties of instinctive expression, we discount the fixity of the instinct-emotions. It is because he fails to meet this issue that McDougall's account of instinct-values can be so comprehensive and at the same time of such little significance

[12]W. McDougall: "Social Psychology."

from a scientific point of view. Another writer could start either with half as many or with twice as many instincts as McDougall takes and attribute to them the values of society with equal plausibility and equal futility.

V. Summary

We may sum up the results of the discussion thus far very briefly. The mechanist and behaviorist define instinct in such a way as to eliminate the concept of value. On the other hand, those who define instinct in terms of emotion and intelligence make it so easy to attribute all values to instinct that the pursuit becomes everybody's game and nobody's science. Again where instincts are considered fundamental and fixed forces value cannot arise. Whereas where instincts are considered merely elements in an organism which expresses values more comprehensive than the separate instincts themselves, the big question is: What relations exist between the values which represent the organism as a whole and the instincts which go to make up that whole? In short, how can the conception of mechanism and value be logically reconciled?

VI. The Valuing Process

There is, in all of the views which we have discussed, an apparent failure to take account of a principle which has an extremely important bearing on the problem before us. This is the principle of synthesis or fusion, variously stated and applied by writers of the last century. John Stuart Mill, in his Logic, formulates this principle under the name "mental chemistry." It is the principle of G. H. Lewes' Law of Emergents, Wundt's Creative or Psychical Synthesis, and the governing principle of all those psychologists of the Meinong and Külpe schools who think in terms of 'Gestaltqualität'. Briefly we may state this principle as follows: The sum of the properties of any number of elements is not equivalent to the properties of any compound of these elements. Or, put in another way: The properties of any compound are unique and independent of the properties of the individual constituents.[13] A simple illustration of this proposition is the fact that hydrogen and oxygen, when united, produce a compound which has properties that neither of its constituents possessed before that union. In terms of our problem, this means that the elements or specific instincts

[13] I am indebted to Dr. Henry Hooker for the exact formulation of this principle. J. S. Mill, in his Logic, states it in various ways, as for instance: "The effect of concurring causes is not always precisely the sum of the effects of those causes when separate, nor even always an effect of the same kind." H. C. Warren's "History of Association Psychology" describes this principle historically.

which are supposed to enter into the structure of the organism do not, when taken together, explain the organism or the values which it may give expression to. An organism resembles a compound and has qualities not contained in any of the instincts, reflexes, or physico-chemical configurations into which it may be divided.

Now what are the properties which characterize the organism as a unit but which do not characterize any of its elementary parts? There may be many such properties; but may they not be summed up by saying that the chief characteristic of the organism as a unit is the valuing process? Is not this the really unique quality of an organism, and is not the organism in its various activities governed by this valuing process? We have already seen that instincts, taken as mechanistic or behavioristic entities, cannot really determine or give rise to values in any sense. They can merely tend to give rise to a certain more or less stereotyped response. The values which instincts apparently give rise to derive their significance solely from the relation between particular instinctive tendencies and the tendency of the organism as a unit. And the tendency of the organism at any particular moment is just this practical value judgment, whether explicit or implicit, conscious or subconscious, which uniquely expresses the impulse of any one instinct in terms of its organic setting.

Now, although we have explained this principle after a chemical analogy, it by no means follows that the term "mental chemistry," as stated by J. S. Mill, applies to the situation which we have in mind. For instance, according to the principle of fusion, chemistry is quite within its field in predicting from a compounding of hydrogen and oxygen a substance with the chemical properties of HOH. But HOH, in a situation involving the organism, has qualities or values quite independent of their chemical explanation. In relation to the organism, HOH may be water, a substance having the quality of wetness, and this quality is itself a factor which enters into the causal series and which determines the uses to which water shall be put. Just so, the actions of any theoretically isolated instinct may be explained in chemical, mechanistic, or biological terms, but in its organic setting it expresses itself uniquely in terms of organic values which themselves affect the operation of that instinct and which are not explained by the elements of which they seem to consist.

Therefore, the valuing process, through which the organism is continually expressing itself, is not to be regarded as an 'over-phenomenon' or as a static accompaniment of organic processes, but as itself a dynamic factor in the causal series; for it actually

enters into the determination of the instincts of an organism under certain conditions.[14]

It is the valuing process which brings about such radical changes in the instincts themselves, often causing the organism to act in complete contradiction of the stereotyped tendency of a powerful instinct. For example, we are told that the instinct of self-preservation and that of propagation are the most powerful and fundamental in the organism. And yet, we have numberless cases of individuals who have deliberately sacrificed their lives for values which they considered higher than life. Now it requires a strong stretch of the imagination, or a long process of rationalization, to explain how the instincts of life can give rise to values which exterminate the very instincts upon which they are supposed to be based, unless we recognize the validity of the principle which we have presented.

It may be answered that intelligence and reason are what enable the individual to subordinate the various instincts so that they will serve in the interests of the entire organism. Reason makes it possible for a person to see that his own life is less important than the life of society or the life of a friend. But what is reason without the play of a dynamic valuing process? Reason is essentially a playing against one another of a number of alternative values or value ideas, ending in the final adoption of one of them. What makes it possible to select one from a number of possible values is the presence, within the reasoning process, of a dominating value idea. It is the activity of this dynamic factor which gives to the reasoning process its significance, and which makes possible a choice of values quite at variance with the traditionally instinctive values.

It is really remarkable, once the unique character of the valuing process in an organism is grasped, to see how this conception completes or clarifies many of the problems which have been confronting us. Take, for example, the traditional division of the mind into cognitive, conative, and emotional states. Much of psychology has been concerned with an attempt either to distinguish or to reconcile these three faculties. Now, obviously, the fundamental factor in will, feeling, and reason is the selective factor, the valuing activity. Each of these three aspects of organic activity, therefore, is an expression, in slightly different form, of the valuing process. This is their common denominator.

In speaking of the valuing process as a common denominator it should not be thought that we are introducing into the complex-

[14] A corollary of this, at least in principle, is J. S. Mill's statement to the effect that the generation of one class of mental phenomena from another does not supersede the necessity of an experimental study of the generated phenomena and their laws.

ity of organic and physical events the undue simplification of a mere word. For when we regard values as expressed by an organism, not as abstract mathematical functions nor as merely the mental side of a psychophysical parallelism, but as dynamic factors which themselves play an important part in the determination of instincts and the structural elements which make up the organism, we are describing a situation which is anything but simple. Indeed, our concept of value, properly interpreted, makes inevitable the conclusion that the phenomenal world is infinitely more complex than the deductions of many mechanists, behaviorists, psychologists (especially social psychologists) and others would lead us to believe. On the other hand, the valuing process, using the term as a class term, may consistently be regarded as the commom denominator in the explanation of all phenomena. For the valuing process, or some experience of value analogous to the simple experience that water is wet, is the point from which all reasoning and logical definition have their origin and to which, sooner or later, they must return. No matter where we look, no matter in what branch of science we may engage, the starting point or major premise is not a disinterested, logical conclusion, but an apparently arbitrary, certainly a highly interested dictum. But here again our assertion must be qualified by adding that, although value judgments are the logical limits of all scientific and philosophical reasoning, it by no means follows that the valuing process implies an absolute or unalterable standard of values. Values themselves are relative factors in a strictly relative series of phenomena or experiences. As such, they are subject to change either through a combination of unexplained circumstances or through the systematic investigations of science. To give a homely example, we may value beer as a healthy antidote for thirst; but the results of chemical and physiological investigations may later cause us to choose tea rather than beer. The very fact that values, which instincts are supposed to have produced, are subject to change in this fashion, still further complicates the problem of the relation between instinct and value.

VII. The Philosophy of Instinct and Value

Our study has now led us directly into the field of philosophical speculation. As a matter of fact, only a philosophical point of view can, at present, grasp the relation between instinct and value. And it is only philosophically that we can, at the present stage of the sciences, attribute values to instinct at all. This point will become clearer as we proceed. But even philosophy has struggled long and hard without becoming conscious of the

full significance of the valuing process. Philosophers have speculated all around the value idea, but have seldom realized in it the starting point of all philosophical speculation. The Greek philosophers made reason the distinguishing feature of man, but their emphasis on pure reason misled them. They failed to realize that reason was but a means of the human organism to an end; that the practical reason rather than pure reason was the characteristic aspect of man; and that the practical reason, out of which the pure reason grew as a tendril from a vine, itself proceeded only from the activity of the valuing process. The intellectual cast which the Greeks gave to philosophy has characterized it ever since, so that philosophy has developed largely into a problem of knowledge, an epistemology. In modern philosophy, the tradition of Hegel has reigned, and all life has been interpreted in terms of intellectual ideas, intelligent purpose, absolute knowledge, or completed meanings. It is therefore nothing less than astonishing to find how dependent even the most intellectual and disinterested philosophers are on the implied existence of the valuing process. Kant is, of course, the notable example. On the one hand there is the Critique of Pure Reason and on the other the Critique of Practical Reason. The moral imperative is a rather pompous but still easily recognizable exposition of the valuing process. Certainly, according to our point of view, it is the much more profound and enduring of his two philosophies, though most philosophers have considered it as something of an after-thought. On the other hand, Henri Bergson deliberately contrasts these two aspects of philosophy. The intuitive experience to which he gives priority more nearly resembles what we have described as the valuing process; though by interpreting life in terms of a vital force or an impulse rather than in the terms of a dynamic valuing process, Bergson was led into a serious and unnecessary contradiction between intellect and intuition, between intelligence and instinct, between the mechanical and the organic.

Bertrand Russell stands out among philosophers for his determination to eliminate the disturbing factor of value from philosophy and for his attempt to make philosophy a pure science. And yet Russell, at almost every turn, governs his theory by value-considerations. It is impossible to recount instances here, except to mention his analysis of 'hard' and 'soft' data, but an examination of his writings will reveal how continually this disinterested philosopher makes scientific decisions on the basis of a practical or value judgment rather than on strictly logical or theoretical grounds. Again and again he adapts his proof to the end in view, and as long as his theory enables him to construct in a fairly coherent manner those beliefs and values which he will not give up, he finds his theory satisfactory.

When we come to modern idealistic philosophers, we find that the valuing process is a key to many of the problems which they present. If we take, for example, Royce's analysis of an idea, we see an immediate connection with the valuing process. The significance of an idea, according to Royce, is what it intends. The difficulties which this philosophy encounters are clarified, even though not explained, when we see that at the root of all ideas is this dynamic valuing process. What an organism values may be imperfectly felt, and only faintly understood; still this value is bound to express itself finally in some coherent judgment. It is the value idea that "seeks its own."

As for Pragmatism, it has often been described as a method, not a philosophy. Our account of the valuing process provides a philosophic basis for Pragmatism. Why is it that immediate experience is the touchstone of all knowledge, morals, art? Because the significant fact about immediate experience is the valuing phenomenon. The sense of a dynamic value-idea constitutes both the given element of an immediate experience and the manner in which it shall work itself out in the thinking process. And when the Pragmatist asserts that the final test of truth is its workability, he implies the whole philosophy of the organism as a valuator. For every attempt at truth begins and ends with a concrete valuing judgment. And it is impossible to define workability except in terms of an evaluating standard. The organism and its unique qualities as an evaluator are therefore the philosophical concept upon which Pragmatism rests. As soon as the Pragmatist attempts to explain the significance of immediate experience in terms of instincts, reflexes, tropisms, sensations, etc., he falls into the abstract atomism of physics and chemistry, and loses the very thing he sets out to explain.

This and the philosophy of history are preëminently concerned with the question of value. The possibility of any system of ethics naturally depends upon the selection of a relatively fixed and generally accepted set of values. What most ethical philosophers fail to recognize clearly enough is that these values are never arrived at by a process of pure reasoning or by any scientific procedure. A system of ethics is built up only because the values which it arrives at were already actively present in the thinking process of the philosopher. Consequently we have a Paulsen whose highest value is energy: Aristotle chooses abstract reason: Kant chooses the moral law: the materialist chooses happiness or success. All these, with many minor variations, are clearly the result of the somewhat different personal values with which each individual works.

When we come to the interpreting of history and evolution, this phenomenon reaches its most dramatic significance. Why is it that practically every anthropologist and evolutionist con-

siders the present as the pinnacle of the past and survival as the test of supremacy? Why is it characteristic of historians to regard the events of history merely as the steps and errors by which the present high stage of civilization has been reached? Is it not because the values accepted by the living are the colored glasses through which they view the dead? The present is the highest or most valuable, not because it is an epitome of the past but because we, at this moment, actually value it most. Our values are not valuable because they have survived but because they are *our* values and because *we* value them. It is primarily because the survivor does the valuing that the values which survive are considered valuable. And it is because the surviving historian or the victorious nation *writes the history*, that the values which remain come to be considered the highest values.

VIII. Three Definitions of Instinct

We have now seen that the meaning of value does not lie in an analysis of instinct. Such an analysis but leads us further and further from the meaning of value. And yet it would be merely academic to insist, because instincts are not the fundamental determinants of value, that they play no part in its determination. We feel sure that the instincts do play a part, and a very important part. The question is, How and in what way? The answer to this question may be given in three parts, involving three separate and distinct definitions of instinct.

(1) *The Mechanistic Definition.* This definition has already been thoroughly described in the first part of this paper. Instincts, according to the mechanistic point of view, are definite physico-chemical entities which respond specifically to specific stimuli. The Loeb tropism, the chain of reflexes, the inherited nervous-muscular mechanism, are examples of instincts in the mechanical sense. Even the instincts sought for by the behaviorist, in so far as he is consistent, are mechanistic instincts. Now the mechanistic concept of instinct, we have pointed out, is extremely valuable as a method of research. It has notably enriched our concept of organic behavior and human nature. However, it is practically impossible to find instincts which satisfy the mechanistic point of view. Only certain lower organisms approach mechanical uniformity in their instinctive responses. And if organisms mechanically perfect could be found, then we should be unable to find any values whatsoever. For the very nature of value lies in the combination of imperfect organic mechanisms, conflicting tendencies, an unfavorable environment, and probably the presence of certain indefinable hereditary tendencies. It is this combination of a variety of things which gives rise to the active valuing process which is

probably the unique quality of an organism. We may say, therefore, that the mechanistic definition of instinct is a valuable working concept, but that instincts as thus defined have no real existence and cannot legitimately be used as an explanation of the phenomena of life in general.

(2) *The Pseudo-Scientific Definition.* However, the mechanist himself finds it impossible to adhere closely or consistently to a purely mechanistic conception, and so we find ourselves very soon in possession of a more flexible and less critical definition of instinct. According to this definition, the relatively distinct and specific ways of reacting to the environment are united into comprehensive tendencies which we call the principal or dominating instincts. The striking thing about instincts as thus defined is the fact that almost any instinct or organic mechanism can come to respond in an infinite number of ways to an infinite number of stimuli. This is the concept of instinct most prevalent today and most viciously used. It is characteristic of McDougall and many other psychologists. And it is the concept now made use of by economists, litterateurs, industrial men, and others who fondly think that they have found in psychology a simple answer to problems which have hitherto defied their attacks. This concept of instinct lends itself most readily to the manipulations of pseudo-psychologists and pseudo-scientists of all kinds. As James remarked—and it cannot be too often repeated—it is possible to make almost any classification of instincts on this basis, as long as it answers the writer's purpose.[15] And this is exactly what has been done.

Now we may believe with justice that instincts are important factors in the valuing process, but we cannot with any degree of scientific accuracy say that any instincts thus loosely defined are responsible for any particular values. We can romance about the subject. We can philosophize. We can psychoanalyze. We can rhapsodize. But all within very narrow limits. It is absurd for economists to believe that they can translate their study of economics from the field of conjecture to the field of science by borrowing a set of ready-made instincts from psychology. We can imagine Thorndike, Watson, McDougall, and a few others trying to agree on a classification of instincts as the axioms of economics! We may agree empirically upon the uniformity and strength of the sex instinct. But what relation has this instinct to the marginal desirability of a second, third, or fourth wife? We may believe in hunger as an instinct. But how does this instinct determine the marginal value of artichokes over cabbage, or chicken over duck? Self-preservation seems an obvious instinct and yet how does it determine

[15] "Principles of Psychology," ii, 382.

the marginal desirability of a dull, long-drawn-out existence over a short but exciting life?

If instincts, mechanically defined, can hardly be found existing, instincts according to the second definition can be manufactured so readily and so voluminously as to reflect seriously upon the mental process by which it is done.

(3) *The Popular Definition.* The third definition of instinct is the most vicious of all. Here instinct is practically synonymous with any mysterious manifestation of the organism. We hear of the religious instinct, the moral instinct, the instinct of service, the artistic instinct. Instincts on this level are responsible for such a wide range of values that they might as well not be responsible for anything. Like the benevolent monarch who, unknown to his grateful people, had been dead for twenty years, these broad instincts are but convenient names to which we can never attribute any specific value in any specific sense. We need only take the final step and call the valuing process itself an instinct in order to call attention to the absurdities into which such a loose definition of instinct can lead us. Such logic is undoubtedly what led Condillac to remark that instinct was nothing and Bohn to say that it was a mere word.

IX. Conclusion

Indeed, it requires an effort to keep the idea of value separate from the concept of instinct. Just because value is, in one sense, an unanalyzable factor, we tend to regard it as a sort of mysterious force, a sort of super-instinct which in some mysterious fashion governs and determines the lesser instincts. Undoubtedly, it has often seemed that this was the concept we had in in mind—a kind of over-soul, referee, independent valuator, Absolute, entelechy, which ruled the system of lesser values to which instincts gave rise. Nothing could be further from our intended meaning. Value, either as an idea or as a process, is to be regarded as a characteristic of an organism—a peculiar and unique quality, to be sure—but nevertheless a characteristic. We can but revert to our initial example of water. The unique characteristic of water is wetness, and more specifically, a wetness which only exists between certain degrees of temperature. This wetness is characteristic neither of hydrogen nor oxygen, any more than value is a characteristic of the instincts considered as entities. Now when the instincts—whatever they are—and the protoplasm, the germ-plasm, the effects of environment, are united in the form of an organism, the result is a new characteristic, namely, the valuing process. This process is not merely an intellectual spectator but an active, causal factor just as much as is the wetness of water. It enters actively into the

determination of instincts *and* habits, just as the quality of water is an active determinant of the uses to which it is put.

Therefore, there is in our concept of value nothing of the mystical or the absolutistic. Simply because value-judgments are in a sense the ultimates in our reasoning process, they are not put beyond the realm of knowledge and investigation. Because the present mechanistic conception of instinct is incompatible with the notion of value, we do not mean that there is an unbridgable gap between mechanism and organicity. And if the popular method of ascribing human values to instincts is fantastical or far-fetched, this does not mean that instincts in some way or other do not play a very important part in the makeup of values.

Although there are many conclusions to be drawn from our study, relating to value and instinct, the ones of most importance at the moment are two: first, that the vague and varied notions of instinct now prevalent have led to the wildest and most far-fetched conjectures as to the relation between instincts and values; and secondly, that as soon as we attempt to define instincts with care and precision, we shall be much more modest and scientific in the claims which we make for them. Such moderation and care will in the end lead to a much more accurate correlation between instincts and values than the elaborate cadenzas which psychological virtuosi are now improvising upon the general theme.